

CLAIM LISTING

1. (currently amended) A method to support a reduced resource dormant state for packet data, the method comprising:
 - ~~maintaining session context information for a mobile station (MS);~~
 - forwarding data for ~~the MS~~ a mobile station (MS) to a packet control function (PCF) via a tunnel;
 - releasing the tunnel ~~and a portion of the session context information~~ to support a reduced resource dormant state;
 - receiving new data for the MS after releasing the tunnel;
 - in response to receiving new data for the MS, sending a reconnection request ~~to the PCF~~ for establishment of a new tunnel; and
 - forwarding the new data ~~to the PCF~~ via the new tunnel.
2. (currently amended) The method of ~~claim 4~~ claim 25, wherein releasing the tunnel and a portion of the session context information comprises releasing the tunnel and a portion of the session context information after a period of MS session inactivity.
3. (currently amended) The method of ~~claim 4~~ claim 25, wherein the session context information comprises session information from the group consisting of MIP tunnel binding, mobile-identifier-to-IP-address mapping, PPP context, PCF address, and A10 tunnel mapping.
4. (currently amended) The method of claim 3, wherein the mobile-identifier-to-IP-address mapping comprises at least one of a MIN-to-IP address mapping and an IMSI-to-IP address mapping.
5. (canceled)

6. (currently amended) The method of ~~claim 4~~ claim 25, wherein releasing the tunnel and a portion of the session context information comprises releasing at least a portion of maintained PPP context information.
7. (original) The method of claim 6, wherein releasing the tunnel and a portion of the session context information comprises releasing all maintained PPP context information.
8. (currently amended) The method of ~~claim 4~~ claim 25, wherein releasing the tunnel and a portion of the session context information comprises releasing a PCF address.
9. (currently amended) The method of ~~claim 4~~ claim 25, wherein releasing the tunnel and a portion of the session context information comprises releasing an A10 tunnel mapping.
10. (currently amended) The method of ~~claim 4~~ claim 25, wherein sending the reconnection request comprises sending an A11 Reconnection Request message.
11. (currently amended) The method of ~~claim 4~~ claim 25, further comprising receiving a reconnection response from the PCF in response to sending the reconnection request to the PCF.
12. (original) The method of claim 11, wherein receiving the reconnection response comprises receiving an A11 Reconnection Response message.
13. (currently amended) The method of ~~claim 4~~ claim 25, further comprising establishing a new PPP session with the MS in response to receiving new data for the MS.
14. (canceled)

15. (original) A method to support a reduced resource dormant state for packet data, the method comprising:

maintaining session resources for a mobile station (MS);

receiving data for the MS from a packet data serving node (PDSN) via a tunnel;

after a period of MS session inactivity, releasing the tunnel and the session resources;

receiving a reconnection request from the PDSN for establishment of a new tunnel; and

receiving new data for the MS from the PDSN via the new tunnel.

16. (original) The method of claim 15, wherein releasing the tunnel and the session resources after a period of MS session inactivity comprises releasing the tunnel and the session resources after a predetermined period of MS dormancy elapses.

17. (currently amended) The method of claim 15, further comprising sending a reconnection response to the PDSN in response to receiving the reconnection request from the PDSN, wherein sending the reconnection response comprises sending at least one of an A11 Reconnection Response message and an indication that the reconnection request is being serviced.

18-19. (canceled)

20. (currently amended) The method of claim 15, further comprising requesting a base site controller (BSC) to initiate paging of the MS in response to receiving the reconnection request from the PDSN, wherein requesting the BSC to initiate paging of the MS comprises sending an A9-BS Service Request message to the BSC.

21. (canceled)

22. (original) The method of claim 15, further comprising requesting the PDSN to setup the new tunnel.
23. (previously presented) A packet control function (PCF) apparatus supporting a reduced resource dormant state for packet data, the PCF comprising:
a network interface; and
a processor, communicatively coupled to the network interface,
adapted to maintain session resources for a mobile station (MS),
adapted to receive data for the MS from a packet data serving node (PDSN) via a tunnel,
adapted to release the tunnel and the session resources after a period of MS session inactivity,
adapted to receive a reconnection request from the PDSN for establishment of a new tunnel, and
adapted to receive new data for the MS from the PDSN via the new tunnel.
24. (previously presented) The PCF apparatus of claim 23, wherein the tunnel comprises an A10 Tunnel and wherein the new tunnel comprises an A10 Tunnel.
25. (new) The method of claim 1, further comprising:
maintaining session context information for the MS;
releasing a portion of the session context information to support the reduced resource dormant state,
wherein forwarding data via the tunnel comprises forwarding data to a packet control function (PCF) via the tunnel,
wherein sending the reconnection request comprises sending the reconnection request to the PCF for establishment of the new tunnel, and
wherein forwarding the new data comprises forwarding the new data to the PCF via the new tunnel.